Theme: Basics of phonology: phonemes, allophones and segments.
Based on: Hayes, 2009, chapter 2.

An introductory note, still on phonetics:
Pronouncing the IPA chart: (please let me know if you find further ones…)
    a. http://web.uvic.ca/ling/resources/ipa/ipa-lab.htm
       http://web.uvic.ca/ling/resources/ipa/charts/IPAlab/IPAlab.htm
    b. http://www.yorku.ca/earmstro/ipa/
    Highly suggested "homework": spend 30 minutes listening to them.
    NB: What you hear is not necessarily what you "should" hear.

1. Data: observe sound patterns!   ɹ vs. ɹʷ in American English (Hayes, p. 44)

migrants	['maɪgɹʷənts]	*Homeric*	[hou'mɛɹʷɪk]
or	['ɔɹ]	*trek*	['tɹʷɛk]
from	['fɹʷʌm]	*debriefed*	[di'bɹʷift]
shire	['ʃaɪɹ]	*reply*	[ɹʷi'plaɪ]
tripling	['tɹʷɪplɪŋ]	*Iraqi*	[ɪ'ɹʷɑki]
metaphor	['mɛtə,fɔɹ]	*preys*	['pɹʷeɪz]
iridium	[ɪ'ɹʷɪdiəm]	*ranted*	['ɹʷæntəd]
proclivities	[pɹʷou'klɪvəriz]	*crucible*	['kɹʷusəbəl]
romancing	[ɹʷou'mænsɪŋ]	*indiscriminately*	[,ɪndəs'kɹʷɪmənətli]
February	['fɛbjuɛɹʷi]	*fear*	['fɪɹ]
dwarfing	['dwɔɹfɪŋ]	*dreadful*	['dɹʷɛdfəl]
assure	[ə'ʃuɹ]	*feldspar*	['fɛldspɑɹ]

Hayes' chapter 2 combines the basics of structuralist phonology and early generative phonology.

2. Structuralist phonology

Basics of the **structuralist turn**: language (etc.) as a *system* (F. de Saussure, 1916).

Sapir, Edward. Sound patterns in language. *Language* 1.2 (1925): 37-51.

Levels of abstraction: physical sound > speech sound > allophone > phoneme

Structuralism: phoneme as an abstract entity. Different from the *default/elsewhere* allophone.

Minimal pair vs. complementary distribution

Fieldwork: data collection followed by systematic methods to uncover the phoneme system:
       search for minimal pairs, or demonstrate complementary distribution.
        (In fact, you very often also need to rely on intuition, e.g., whether such a word could exist.)
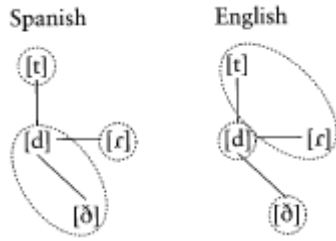
(NB: Spanish [d] is dental, English [d] is alveolar.)

Natural classes and features.

3. Early generative phonology

Two basics of the **cognitive turn**: biological approach + computational approach (Chomsky, 1957).

Chomsky, Noam, and Morris Halle. *The sound pattern of English*. (1968).

Why formalize?
 - after practice, easier to work with beyond a certain level of complexity than plain text
 - more efficient way of communication between trained scientists
 - cracking the software code in the mind / writing code for artificial intelligence.

Programming: data structure + commands + general architecture.
Cf. two major components of a phonological theory:
  1. Representation: "grasp it: this is what it is."
     E.g., segments; features of natural classes; syllable constituents; autosegmental tiers.
  2. Processes (mappings): "do something with it: this is what it becomes."
     In many contemporary theories: *underlying form → surface form*
     (rewrite rules in SPE phonology; Optimality Theory filters).
     Alternative: declarative approach: restrictions on what *surface form* can look like.

'Phonemes' and 'allophones' replaced with 'segments' + introduce features and rewrite rules.

Underlying form/representation → surface form/representation.

Underlying segment, if unchanged, appears as default/elsewhere surface segment.

Phonemes? Allophones? Phonology? Phonetics? p. 29, 33, etc.: /x/ -> [y]

4. Structuralist phonology of Hungarian

Reading for Thursday: Hayes, chapter 3. Kenstowicz 2.5 – 2.7.

Not-yet homework: Create an inventory of the sounds in 'your' language. Describe them using the IPA-symbols. Create the inventory of the phonemes in 'your' language. Search for minimal pairs, or demonstrate complementary distributions, and formulate allophony rules.